Hieroglyphic Espionage

by Geoff Harries

The slim 7-year old girl in the French school uniform ran her finger under the letters.

`P-O-I-S-S-O-N,' she spelt out.

"Poisson" - it means "fish,' said her 34-year old father.

'Oh, "poisson",' she said, absently correcting his pronunciation.

Hugh Jones and his daughter Megan were in a small musty-smelling room, standing before an Egyptian tapestry in the Musée de L`Humanité, in Paris. They strongly resembled each other but whereas she had brown eyes in a small mischievous face framed by straw-coloured hair, he had a sober bearing, black hair and intense blue eyes.

'It doesn't look much like a fish to me,' said Megan.

`It's just a symbol of a fish,' explained her father. `If you were writing a letter to someone, saying you had been sailing on the lake and you had caught two fish and your brother had caught three fish and your mother-in-law had not caught any fish, you wouldn't want to be drawing fish all the time, would you?`

'Why didn't they just write "fish", like we do?'

`Because writing hadn't been invented then,' he replied. An inspiration. `And suppose you were writing to your uncle in Greece. He wouldn't understand the Egyptian for "fish" but he'd recognize the picture of one.' She opened her mouth to make some more objections so he ran his hand along a row of the stiffly stylized figures.

`Look at this. The Sun Goddess is angry with her husband the Sun God because he's looking at this girl who's not wearing any clothes. The Sun God is saying it's just because it's so hot.' Her little pert face looked up at him startled. She giggled and pulled on his hand.

'Oh, Daddy, you're making that up!'

`No, no,' he said straight-faced. He leaned forwards to study the pictogram more carefully `Now this dog-faced God, he's the Sun God's friend, he's saying "that's right" and pointing to the sun. And this other girl, who's also not wearing any clothes and is giving some grapes to this priest is agreeing, saying er ...'

His invention was failing when they heard voices speaking French just outside the door. A deep male voice and a lighter female voice saying something about `ce flic' in a disparaging tone. Megan stiffened.

A couple entered the small display room. A tall straight Frenchman of about 50 with brushed-back silver-streaked hair and wearing a black suit was accompanied by a slim dark-haired girl of about 26. She was dressed in a light-brown calf-length suede coat and had a brown and yellow silk scarf at her throat.

The Frenchman went up to the tall broad-shouldered Englishman.

'You are Meester Jones?' he asked.

`Monsieur Krieger?' he replied. They had arranged to meet here on a Friday afternoon, rather than at his work place, for `security reasons'. They shook hands formally in the French fashion and Monsieur Krieger presented `Mademoiselle de Pril, `one of my co-workers'.

`Mademoiselle de Pril is a graduate of the Ecole Polytechnique,' he added.

The girl gave Hugh a small cool hand and he looked into wide-spaced velvetbrown eyes set in a triangular shaped French face. She had her hair up showing a long slim neck and wore small pendant ear-rings. His heart sank. Another of those beautiful unapproachable French girls he so often saw walking down the Champs Elysées on the arm of an impossibly handsome man. And intelligent too. The Ecole Polytechnique was the top academy of the very élitist French education system. `Mademoiselle' - she was probably the mistress of some brilliant painter or musician.

`And this is Mademoiselle Jones?' asked Monsieur Krieger, leaning down affably to Megan who was standing by her father's side shyly holding his hand. When Hugh had made the appointment he had asked if he could bring his daughter. He had quickly explained he was divorced and was bringing her up himself, `so please don't ask her any questions about her mother.' Monsieur Krieger had readily agreed on both counts.

`Er, yes, my daughter,' said Hugh, dragging his eyes away from the girl.

`Megan. Meet Monsieur Krieger.' To his surprise Megan gave a little curtsy and gravely shook the man's hand. She must have learnt that at her school. In her beret and blue blazer she looked every inch a French school-girl.

`Bonjour Monsieur,' she said.

`Jacques,' he insisted. There was a short pause.

`And Mademoiselle de Pril,' said her father, hand on his daughter's shoulder. Stiffly, lips pressed together and with the absolute minimum of a curtsey Megan shook her hand. Hugh looked down at her in surprise.

`Geneviève,' added the young lady at Jacques's side and Hugh knew that to be on first name terms with the French was a rare privilege.

`I must thank you for giving up your afternoon together to meet me in this unconventional manner,' said Jacques. Hugh made a gesture of acceptance; he often met his customers in unconventional locations. `But I thought we could talk safest here.'

`You have a security problem,' stated Hugh. With the end of the "Evil Empire" the British government was able to wind down MI5, its counter-intelligence service, and had offered favourable gratuities to those who wished to take premature retirement. Hugh had done just that, thereby becoming part of the `peace dividend'. He had started his own company in the remarkably similar field of industrial counterespionage.

Jaques glanced backwards at the door then:

`Indeed we do. We are a small, what you call a "high tech" company, writing specialized software. We also have a product of our own called the "DocView". We have heard our principal competitor is obtaining information on the "DocView".'

"We have heard",' repeated Hugh. 'You are sure?' Customers who requested his services were often rather paranoid.

'We have our sources,' said Jacques with a thin smile.

Not for the first time Hugh remarked there was more activity going on in the field of industrial espionage than he had ever had to contend with against the KGB.

'Yes, all right,' said Hugh, looking down at his daughter who was tugging at his hand. 'But don't go too far away.'

She left the room to explore outside and he turned back to Jacques.

`Patenting?' he asked.

`Almost useless with software,' answered Jacques. `A release just lets the competition know how you're doing it and programming is so flexible they can usually find another way without infringement.'

A patent is only worth what you're prepared to spend to defend it, Hugh remembered. And against a big corporation with its legal department ...

`If you could tell me something about this "DocView" product?' Jacques glanced around the still empty room.

'Meester Jones ...'

'Hugh.' Jacques nodded and began again.

`Hugh, what do you know about "text analysis"?'

Hugh had heard the expression, but each writer had his own idea of what it meant. He shrugged. Jacques took a breath then changed his mind. He gestured to his partner.

`The "DocView" program is Mademoiselle de Pril's idea: she has spent more than a year working on it.'

Geneviève looked at Hugh as though estimating his ability to understand, and not coming to any favourable conclusion. She began in a high clear voice:

`We have programmed an ordinateur, a computer, to construct hieroglyphs out of words,' she began. She had a slight lisping French accent.

`Ah,' said Hugh.

`After a search for context relevant morphemes, the computer uses pattern recognition algorithms to compare them with a list of customer-given prioritized words to produce a normalized coloured diagram summarizing the document's contents.'

She was speaking English, and these all sounded like English words, but she may as well have been speaking Swahili for all Hugh understood. Jacques must have noticed his glazed eyes.

`Mademoiselle de Pril has devised a program for a computer which recognizes the words in a document, analyses them and draws a diagram visually summarizing the contents of the document.'

'But how can you..., where would you use, I mean ...' he stumbled to a stop.

`With word processors, photocopiers, the media, the World Wide Web..., we are being flooded with written words as never before,' answered Jacques. `The problem is selection. How do you select what to read?'

`Well, I look for interesting titles first,' began Hugh.

`The titles probably wouldn't be too informative,´ replied Jaques, `you mean you would read the resumés, assuming they were available?'

'Yes, I suppose so.' Hugh thought a moment. 'And couldn't I search the documents for key words, like I in fact do on the Web?'

`My dear Hugh,' said Jacques with a smile. `Even in your own field of industrial espionage there are more than 50 articles, average length 3000 words, being published per day! In English. In one year ...' Hugh held up his hand. It was clever of Jacques to have researched his subject.

`Word search is how it's done now,' added Geneviève rather impatiently. `But you can only search for a few words. Once you have learnt our symbology you can search for the sense, the utility for you.'

Yes, it would be a real cute gadget, thought Hugh.

I can see how useful it must be,' he said aloud. But then:

`And the document doesn't need to be in French?'

`No,' said Jacques. `Provided the appropriate dictionary is available in computer memory, the document can be in any language. You can see the overall sense of a document without even understanding it.'

`It lets you select only interesting documents for translation,' added Geneviève.

Hugh looked down out of the dusty window at the crowds of well-dressed people strolling along the side of the Seine in the bright summer sunshine. It sounded a bit far out. How could you make a picture out of words? Then he glanced at the formalistic Egyptian figures marching across the wall. They were pictures made out of words. And Japanese and Chinese writing was also pictures of a sort.

A Hong Kong girl had told him once how her father in the import business worked with the mainland Chinese. He would dictate a letter to his secretary in Cantonese. When the letter arrived in China the secretary of the Managing Director would read it out to him in Mandarin. Neat - language independent communication.

He remembered having suggested to her that symbol writing could only be rather mechanical and not capable of giving the fine nuances of imitated pronunciation speech. But she had hotly denied this, saying she could be moved to tears on reading a poem written in ideograms.

But what exactly did they want him for? He turned back to Jacques.

`Perhaps if you could clarify my contribution to ...' he began, graciously extending one arm in the formal manner he seemed to fall into when speaking with the French.

`We have found our principal competitor is getting hold of the code, the computer program we are writing,' replied Jacques. `At the moment they are merely filing it away as they don't know what it's for. But we must soon start making press releases to launch our "DocView" and then they will guess ...'

`And after "reverse engineering" it, bring out their own product at half your price as they have no development costs to amortize,' finished Hugh.

`Exactly,' said Jacques.

`Can you estimate when this leak started?' asked Hugh.

`The program is written in modules: what they have stolen is the modules we have been working on during the last month,' said Geneviève.

Hugh looked at her tense beautiful face, remembering the "DocView" was her idea and she had been working on it for a year. Probably weekends, holidays and far into the night. It would be her big chance in the very male chauvinistic French society. And now someone had started stealing it.

So the leak started a month ago, mused Hugh. Just the recent work. He began to have an idea.

They made arrangements for him to visit their office the next morning, Saturday, at 9am. Jacques said there would only be a few employees present and he could look around in complete freedom. Of course he could bring his daughter.

Hugh caught sight of Megan's bored looking face at the door. Museums are not very interesting places for little girls. Seeing them all shaking hands she entered, passing Jacques and Geneviève on their way out. She smiled at Jacques, ignored Geneviève and came up to her father.

`We're going round to see their office tomorrow,' said Hugh.

'You said we were going to the Musée Grévan,' she complained.

`It'll only be for the morning. We'll do the museum in the afternoon.'

`And will she be there?'

`She? You mean Geneviève? I suppose so.' He remembered his daughter's reactions. `What have you got against her?'

Megan looked up at her father.

`She called you a "flic" - a cop,' she answered indignantly. There seemed to be more to it than that but after looking at his daughter's set face he decided not to probe. Some female thing, he decided.

SOCELOG, or the Society for Sofware Development, was on the 23rd floor of Tour 6, one of the very modern skyscrapers in `La Défence', the west end of Paris. They went there by a rapid train running on rubber wheels and then by a moving "travellator" which took them to the base of the tower.

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Megan was cute in a little red coat and plaid skirt: Hugh looked athletic in white jeans and a brown sports jacket.

They entered the lift and after a twenty-second ear-popping ascent stepped out into a quiet thickly carpeted corridor. They walked down it, one on each side, looking for the SOCELOG logo. Megan found it first and was allowed to press the button.

A nasal voice from a nearby grill asked who was there and with a crackling buzzing sound the door was unlocked.

They entered and waited, looking at the empty reception desk and the clean but rather cheap plastic décor. Hugh was wondering whether to penetrate further when they heard footsteps and a young girl appeared and led them along a corridor past empty rooms. She tapped respectfully on a door and showed them into Jacques's office. Ah, a lot different. Dark velvet curtains surrounding a big window looking out over Paris, a leather-topped oiled-teak desk with a parchment-shaded desk-lamp.

Jacques, dressed exactly the same as yesterday, removed his spectacles and after shaking hands with them both, let them look out of his window for a moment then asked if they would like coffee. Noticing the pile of unopened mail on the desk, Hugh declined politely and went straight to business.

`I would like an organization chart of your company showing all those who have access to the program,' he began. `Then I would like to see your computer room. And I also think it would be useful to see your "DocView" program in operation.'

`Very well,' said Jacques. He went into the neighbouring room and returned with a piece of paper covered with squares joined with lines. He handed it to Hugh.

Don't hesitate to ask me if there's anything that's not clear.' he said.

He ushered them out of his office, along another carpeted corridor and stopped before a stout wooden door. He pushed a card into a slot and tapped a number into the keypad. The door clicked open. Hugh made some appreciative remark.

`We do the obvious things,' said Jacques shortly. `We also have two armed guards on duty at reception during the night,' he added.

They were now standing before a thick glass door, looking into a large well-lit room filled with computer racks.

A young man wearing jeans and T-shirt was sitting at a keyboard. He noticed them, stood up and thumbed a button on the wall. The door buzzed and swung open. He went back immediately to his keyboard.

`This is Michel,' said Jacques. The young programmer looked up briefly, extending his hand to be shaken.

`We are very busy this morning,' explained Jacques quietly. `We are doing a final run-through of the "DocView" program, sewing all the modules together into one file. So we won't be able to show you it in use, but Mademoiselle de Pril can show you some of its results.'

Megan looked round curiously then stiffened when she saw Geneviève in a side room. She was wearing jeans, sneakers and a worn sweater. One leg folded under her, she was talking into the phone, her right hand carefully stroking her hair over her right ear. Noticing their arrival she replaced the phone and with a single fluid motion rose to her feet and came over to shake hands. Casually dressed and with no make-up, Hugh thought she looked a lot younger than the day before, more like a student.

`Could you please show Hugh some of our results?' asked Jacques. She nodded and opening a draw in her desk pulled out some coloured pictures and selected two. At first Hugh thought they were abstract art until he saw printed in the corner of one: `Chaperon rouge 24,352 bytes.'

`This is a childrens' story about a little girl who is visiting her grandmother and is eaten by a wolf. I don't know the English title.'

`Little Red Riding Hood,' said Megan, drawn by curiosity to her father's side.

Hugh looked at it, trying to relate it to the story as he remembered it. He saw a simple pattern, clearly defined in primary colours. A single black line going diagonally from bottom left to top right. The black line was joined by another red line near the middle and by another blue line near the end. The black and blue lines ran parallel at the end and the red line disappeared.

H'm.

`These lines are the characters,' said Geneviève pointing with a pencil. `This is the little girl and here she meets the wolf. Red is for "bad" and "blue" for good. This red line is the wolf and this red patch shows where he eats her. Here is the, how do you say, chopper of wood? the woodcutter, who saves her.'

A blue line appeared and touched the red patch which diminished and everything finally disappeared top right into a bright blue cloud.

A simple story with three principal uncomplicated characters and a happy ending.

`At the other extreme...,' said Geneviève sliding the picture to one side, `here is a spy story by Le Carré.'

An intricate network of characters all in different colours, often changing as the plot advanced. A complex pastel shaded background. In the corner was printed `L'éspion qui vient du froid', 743,260 bytes.

`What do you think of our new toy?' asked Jacques.

`I'm impressed,' said Hugh. `I think you've got a product. It will take people a little time to get used to it but then they'll wonder how they ever did without it.'

He paused. He had once had a job to do with a famous publishing house and had learnt that when someone impulse buys a book, 60% buy according to the design on the jacket and 40% according to the author's name. He repeated this to Jacques.

`Yes, we have the same figures,' said Jacques. `But now the publisher will able to print the "DocView" diagram on the back of the book and you'll see what you're buying. It's a program that will judge all books by the same standards.'

`Anything's better than the super-enthusiastic blurbs they put there at the moment,' said Hugh feelingly.

The phone rang. Geneviève picked up and wordlessly handed it to Jacques. He spoke a moment and said:

'I must go back to my office.'

ice.'

Hugh was prowling around behind the computers. Jacques had left the room and Megan was sitting on the carpeted floor in one corner, reading the book she had brought. The room was warm and all he could hear was the whisper of the air conditioning, the muted hum of the computer fans, the tap of Michel's keyboard and an irregular chattering coming from some component in a nearby computer rack.

Hugh peeked through the wall to wall window, just gently parting the nylon mesh curtains to make a small gap. From the 23rd floor there was a wonderful view over Paris. Tour 6 was one of a crop of skyscrapers all very imaginatively designed. Rectangular with rounded corners, hexagonal, cylindrical, the nearest one with wide-

spread feet and tapering upwards like the Eiffel Tower. Some had blue or copper tinted glass brilliantly reflecting the morning sun. Others had windows alternately tilted to right and left. Anything to avoid a regular box shape.

Lower down, lots of high-speed early morning traffic snaked out along the roads that ran under and around the towering skyscrapers. Weekending Parisians heading for the north west coast - Normandy or Brittany.

Hugh had a quick glance around at the grey plastic computer monitors and immediately saw the most probable way the computer code was leaking to the competition.

He opened his briefcase and pulled out a telescope normally meant for a sniper's rifle. He carefully parted a small gap in the mesh curtain, put the scope to his eye and scanned around the feet of the skyscrapers, looking for a parked truck. A truck with a rather high roof. But there were no parking places on the Autoroutes below.

So it would have to be in one of the skyscrapers. One of the offices in the nearest elegantly tapering skyscraper? He put the scope to his eye again and examined the windows but couldn't see anything because of reflections from the blue-tinted glass. Unlikely to be an office anyway - difficult to come by at short notice and very expensive. He continued looking.

Gradually the cross-hairs crept up the side of the building, up to the top of the building with its satellite dishes, flashing red light and helicopter landing pad. About 500m away and slightly above the SOCELOG office.

He caught his breath. There they were! A small horizontally polarized Yagi array pointing directly at him!

So as not to attract any attention he stepped back slowly from the window and resting his arm on a computer console clicked the scope up to maximum magnification. Yes, that was it alright. The antenna was mounted on an obviously temporary stand behind a water cooler so it wouldn't be seen from the helipad. A thick cable went from it to a large box which he recognized as a high-speed tape recorder. If he had any doubt left it was removed when he saw a tiny figure in an anorak wearing headphones open the recorder and change a tape cassette.

He smiled with satisfaction. Excellent, case solved! With a springy step he entered Geneviève's office to find her leafing through a thick block of Z-fold printouts.

`I'd like to show you something,' he said. Wide-eyed she rose and silently followed him around the back of the row of cabinets to the big window. Without her high heels she only came up to his shoulder.

He handed her the sniper scope and through the narrow gap in the curtain pointed out the roof of the adjacent skyscraper.

`Look to the left of the red beacon. And now down a bit. You see it? That's a high-gain directional antenna picking up the radiation from your computer. From your monitors, to be exact. The cable goes into a tape recorder.' She stared into the scope in unbelieving horror.

`How do you know?'

'I've seen similar things before,' he answered.

`Mon Dieu!' she said to herself. She took her eye from the rubber eyepiece and looked up at him.

`But that can't be true!' she said. `If they can pick up signals from our computer they can pick up signals from all the computers in this building!'

Hugh shrugged and said nothing. It was sharp of her to have realized it. It was one of the best-known best-kept secrets in his job. But then you had to be very sharp to pass the tough competitive exams to get in the Ecole Polytechnique.

`Les salauds!' she spat as it hit her. `They just have to point that thing at an office window and they can read anything that's on the monitor screens!'

And then:

'I must switch off the computers.'

`No, leave them on for the moment,' said Hugh. `They don't know we know yet,' he continued. `Stop your program running but leave everything else on. We've got to think about this.'

She said something to Michael who after a moment of surprise typed `Abort' into his keyboard. She returned to her office and picked up her phone.

Hugh knew from experience in the cold war that if the opposition were denied one access to something they really wanted, they would usually find another. It would be best if SOCELOG fed them false code and did the real work somewhere else. Hugh didn't consider a case solved until he had provided a complete solution.

A minute later the door alarm buzzed and they saw a dishevelled Jacques waiting outside the glass door. Geneviève let him in and Hugh repeated his explanation about how an antenna opposite was picking up signals from their computer.

He went to the window and before Hugh could stop him pulled the mesh curtain aside.

`And so the life blood of our company is drained off,' said Jacques bitterly, looking into the scope sight.

He glared across at the skyscraper opposite, reached out and pressed a button by the side of the window. Immediately the aluminium sun shutters hummed closed. In the resulting darkness the overhead fluorescent lights flickered and came on.

`That should stop the bastards,' he said viciously.

`Damn,' said Hugh. `I wish you hadn't done that. Now they know we know.'

`Yes,' said Jacques after a pause. `That was inexcusably stupid of me. Can't I open them again?' His hand reached out.

`I'm afraid it's too late. They will also have a video camera connected to a recorder and when they play it back they will see they have been detected.'

Hugh was furious with himself - he should have anticipated Jacques's reaction.

He stood there cursing himself as Jacques returned to his office to inform the police. Useless.

Hugh pressed the button to open the sun screens again and through the scope had all the confirmation he wanted. Four small figures were clustered around the antenna. One was speaking into a mobile-phone, one had a pair of binoculars up to his eyes looking across, the other two were dismantling the equipment with frantic haste. There, he saw the characteristic "Cross of Lorraine" shape of the Yagi antenna swing up against the sky-line then disappear behind the parapet. In five minutes the roof of the skyscraper was deserted.

Geneviève went back to her office to try to estimate how much more of the code had been stolen.

He felt a small figure against his leg. He lowered the scope.

`Did you find anything Daddy?' He nodded and ran his hand affectionately over her hair.

`We won't be long now,' he said. She smiled up at him and went back to her book.

And indeed it was all over. He should now just send in his bill and fade. He had stopped the leak, but there would be others. The only advice he could give them was to tell them to buy special metal-cased monitors that didn't radiate radio signals. And to get the "DocView" into production as soon as possible.

He heard the door buzz and Michel, eyes down on a printout, passed him on his way to the wall switch and unthinkingly pressed it.

Hugh didn't see it, but two men entered, dressed in the uniforms of a delivery service and carrying a large box prominently marked `IBM'. One was thick-necked and broad-shouldered; the other small and rat-faced wearing steel-rimmed glasses.

Michel, surprised, said something to the bigger, but a beefy hand in the chest contemptuously brushed him aside. His head struck the corner of a computer rack and he fell stunned to the floor.

`Allez vite!' said the bruiser. The rat-faced one pushed his glasses up the bridge of his nose and looked around. He slowly walked down the row of computer racks and stopping in front of one pulled out a heavy screwdriver and began to remove a unit.

Hearing the commotion, Hugh walked from behind the rack. The rat-faced one saw him and shouted a warning, jabbing his screw-driver at Hugh's face. Hugh stepped to one side and automatically kicked Ratfaced's knee with the instep of his right foot. He collapsed to the ground, his screw-driver clattering against the rack. Hugh looked down surprised at his attacker and then saw the big dangerous-looking man standing by the door, with Megan's frightened face to one side.

Hugh stepped forwards to put himself between Megan and the bruiser. He just hated to see Megan anywhere near the thug and only wanted him to make his escape. He was here to solve a technical problem, not tangle with thugs.

But seeing Ratface lying on the ground and his attacker moving towards him apparently menacingly, the bruiser made a fatal mistake.

He jumped to one side and put an arm lock around Megan's neck, pulling her up from the floor. He stretched out his other hand to Hugh in the unmistakable `Keepoff' sign.

`Vas-y!' he said and Hugh heard Ratface get to his feet behind him and the tinkle of his screw-driver blade as he continued to remove the unit.

In two seconds everything had changed!

Through a red haze and over the roar of a thumping heart Hugh heard a voice urgently shouting `Attack! Attack!'. It was the distant voice of the sergeant on the unarmed-combat course.

Knees spread, flat-footed, hand in front of his face, Hugh advanced slowly on the bruiser who looked at his build uncertainly. Hugh made a convulsive move forwards. His daughter screamed. He froze, trembling. Watching him triumphantly through little vicious eyes buried in fat, the bruiser backed slowly away towards the door, dragging Megan with him, his hand around her neck holding up her head. Ratface appeared from behind Hugh, holding to his chest a grey-painted box with wires hanging from it and backed into the glass door to open it. The two of them were going to leave, taking his daughter as a hostage!

At that moment there was a scream of fury and a slight figure leapt from the office door and grabbed at the thick arm around Megan's neck. It was Geneviève! She was far too light to dislodge it but succeeded in pulling him off balance. His hand loosened on Megan's head an instant and she ducked out.

`Bite his hand!' shouted Hugh to his daughter and moved forwards. Megan lowered her head, grabbed his hand with both of hers and bit his wrist.

Confused by the double attack the bruiser staggered and straightening his left arm tried to shake off the two females.

Hugh could never remember quite what happened next. Filled with cold fury he leapt forwards and leaning over Geneviève who was now on her knees but still hanging on grimly, he feinted at the eyes of the bruiser with his left hand. The bruiser flinched, parried with his right and Hugh jabbed at the throat with extended fingers. They sank in and the bruiser gagged. He rocked back and turned to exit the glass door held open by Ratface who was shouting urgently.

But Hugh could still hear his daughter's scream.

He flexed his knees, measured the distance and simultaneously straightening his legs delivered a tremendous blow with the heel of his hand to the rolls of fat at the nape of the bruiser's neck. As though completely detached from the action Hugh felt the shock run up his arm and saw the squat head jerk forward then stop as his face hit the edge of the heavy glass door with a sickening thud. He buckled at the knees, his face sliding down the glass leaving a thick smear of blood. Ratface gave a startled cry, dropped the box he was carrying, scrambled through the jimmied-open wooden door and disappeared.

Sweating, panting and with a racing pulse Hugh stood over the still body like a hunter over a fallen ox, massaging his right hand with his left. He felt small arms around his leg. It was Megan and she was sobbing. He put his hand comfortingly on her head. The world stopped moving and he took a deep breath.

Geneviève was lying on her back over his right foot so he placed his hands to her shoulders to heave her up. She was surprisingly light and her slack form came up so suddenly that he found his face just inches from hers with her looking at him slightly cross-eyed. He bent forwards and unthinkingly kissed her. It seemed the natural and obvious thing to do. Stunned she lay in his arms a moment then made a slight movement of protest. Muttering an apology he pulled his head away and helped her to her feet.

Megan kicked the body at her feet.

They were all in Jacque's office. It was 3pm. The police had left, taking with them the still unconscious prisoner in an ambulance. A complaint had been lodged and Ratface had been described. A police team had visited the skyscraper opposite. There was some slight chance they could detect who had been there because of fingerprints left on the parapet. Michel had been sent to a local hospital for a check-up but was probably all right, apart from a cut on his forehead which had needed five stitches.

`They must have known your working habits,' explained Hugh. `They would have been recording as usual when suddenly the signal disappeared. They rushed up to the roof and saw the sunshades closed. When they played the video camera recorder back they would see people had been looking across at them with a telescope and then the sunshades closing. This told them they would get no more of what their employer had said was a very interesting program. So knowing there was hardly anyone here they decided ...'

`On a "coup de main",' completed Jacques grimly. `They got in easily enough by pretending to deliver computer spare parts but they encountered more resistance than they expected.'

Compliments had been paid all round and everyone looked pleased. The box dropped by Ratface was a computer hard-disk and contained most of the "DocView" program. Ratface himself had escaped.

`Well, I suppose you will want to be going off with your brave little daughter,' smiled Jacques.

`Yes,' said Hugh, reaching out for his daughter's hand. `I promised to take her to the Musée Grévin.' To his surprise he found she was also holding Geneviève's hand.

Megan looked up at him with exasperation.

`Oh Daddy, we can go to the museum another day. Tante Geneviève is going to take us up the Eiffel Tower.' The bewildered expression on Geneviève's face showed she was as surprised as he was.

`Am I?' she said. `Er, yes, I could, I suppose.'

The End

Note from the author. The technical data concerning the pickup of radiation from a computer monitor is correct and is the subject of the military "Tempest" program in the US.

And summarising a text by a series of standard icons should not be too difficult. It would perhaps allow us to recover some of the advantages we lost when writing moved from pictograms to imitated pronunciation.

Ver. Dec.00